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Educating Globally Competent Citizens: An AASCU Red Balloon Project

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In 2006, the American Association of State Colleges and Universities (AASCU), the Center for Strategic and International Studies (CSIS), and *The New York Times* initiated a joint project entitled “Seven Revolutions: Educating Globally Competent Citizens.” The primary goal of this project was to design a specific program to promote the study of issues with global importance in hopes of creating students who are more knowledgeable and engaged global citizens. This program, centered on the Seven Revolutions framework developed by CSIS, focused on seven important categories relevant to global citizenship as well as significant future trends: Population, Resources, Technology, Information, Economic Integration, Security/Conflict, and Governance.

Over the last six years, the joint project has undergone a variety of important changes, emerging as one of the AASCU Red Balloon projects. The authors’ campuses have been involved in the AASCU project during this evolutionary process, both serving as scholars for the project and one serving as the national coordinator. They have both taught courses using the Seven Revolutions framework, have helped lead several national and regional workshops and institutes related to the project, and have helped develop the national blended learning model course as well as the forthcoming eBook. This paper will describe the project in its “Red Balloon” context, describe teaching tools and resources, present the results of a cross-institute survey of students, and share this collaboration as a powerful model for other initiatives aimed at re-imagining higher education.

History

The Seven Revolutions framework was originally conceived at the Global Strategy Institute (GSI) at CSIS, a non-partisan public policy think tank in Washington, D.C. It was developed to identify and analyze the key policy challenges and trends that leaders and policy makers will face to the year 2025 (today CSIS sets that future date at 2030). It was an effort to promote strategic thinking about the long-term trends projecting into the deep future. In 2006, Erik Peterson, then the Director of the GSI at CSIS, gave a Seven Revolutions presentation to a gathering of AASCU institution administrators. AASCU’s Vice President for Leadership and Change,

George Mehaffy, and others in attendance immediately recognized the framework's potential for academic programming. From this inspirational presentation, a partnership formed, including not only AASCU and CSIS, but also *The New York Times*, which had partnered with AASCU in 2003 to form the American Democracy Project whose related mission was to create programs to prepare the next generation of informed and engaged citizens. The collaboration united several valuable resources: CSIS provided expertise in policy and trend analysis, *The New York Times* provided hyper-current news resources as well as archived material dating back more than 150 years, and AASCU provided the disciplinary and pedagogical expertise of teaching faculty as well as the resources of over 430 campuses representing more than three million students. A more comprehensive description of the project's history can be found in Hamlin & Whitaker (2010).

Eight AASCU institutions, including the authors' campuses, joined the original project in 2006. Initially referred to as the Seven Revolutions Project and the Seven Revolutions Scholars, the project eventually took on a new name – *Global Challenges*—and the scholars became the AASCU Global Engagement Scholars. During the first four years of the project, the scholars developed a wide range of curricular and extracurricular programming designed around the Seven Revolutions framework and using the rich resources of the partner organizations. They developed teaching materials such as PowerPoint presentations, assignments, syllabi, and a repository of on-line and in-print resources. In addition, scholars presented talks at the American Democracy Project Conference each summer and conducted institutes and workshops sharing strategies for incorporating Seven Revolutions material into college curricula.

The partnership between AASCU and its scholar campuses, CSIS, and *The New York Times* led to the production of two initial publications: 1) *Teaching Seven Revolutions: A Tool Kit for Educating Globally Competent Citizens*, and 2) *Seven Revolutions Student Guide*. The Tool Kit (<http://csis.org/publication/educating-globally-competent-citizens>) was designed primarily for faculty and administrators interested in incorporating this material into curricula. It contained a description of the different revolutions by Erik Peterson, the former director of the GSI and creator of the Seven Revolutions framework, including interesting statistics concerning the revolutions. The AASCU scholars contributed syllabi from freshman level, honors, and capstone courses. The Tool Kit also included a section on activities and assignments and a list of in-print and on-line resources including the rating and use of each resource. The Student Guide contained interesting facts and descriptions of the Seven Revolutions.

Global Challenges: Promise & Peril in the 21st Century, A Blended Learning Model Course

At a scholars meeting in Washington D.C. in April 2010, George Mehaffy shared his call for “re-imagining higher education” and asked the scholars to take the curricular pieces they had been sharing via institutes and workshops, the Tool Kit, and the Student Guide, and turn them into something that could serve as a Red Balloon model. Over the next several months the scholars worked to develop a national blended learning model course. The scholars developed the eCourse collaboratively, making full use of the varying areas of disciplinary expertise among the scholars in the group. Eight teaching faculty from five of the AASCU Global Engagement Scholar campuses, collectively representing seven distinct academic disciplines, contributed to the development of the course. They chose resources based on experience across several campuses and employed activities well-tested in classrooms. The partnership with *The New York Times* proved pivotal. *The New York Times'* collaboration with the Epsilon eLearning Environment, a comprehensive web-based course administration and professional and social networking system, provided a platform for the blended learning model course. Through Epsilon, students and faculty would have access not only to course materials, but also to the entirety of *The New York Times* digital content repository.

The eCourse also relied on the latest research on course redesign and blended learning. For example, course development was informed by the supplemental model described by Carol A. Twigg, President and CEO of the National Center for Academic Transformation (NCAT). Traditional in-class experiences or highly interpersonal online experiences can be enhanced with out-of-classroom activities using interactive technologies that allow students to work at their own pace (Twigg, 2003). The independent online activities create additional in-class space for more interactive and collaborative learning. The course also adheres to some of the principles of course redesign advocated by NCAT (2005). The course is collectively improved, redesigned, and re-invented on an on-going and collaborative basis, incorporating not only the experience of the AASCU scholars, but also the shared experiences of other educators across the country who use the course in Epsilon. The scholars update the course shell on a biennial schedule, considering the input and experience of the scholars themselves, of insights shared by other educators at institutes and workshops, through shared resources such as Facebook and Diigo, and through the *Global Challenges* web collaborative. The course shell encourages active and collaborative learning, employing interactive web-based resources such as interactive maps, including on-line discussion forums for exchanging ideas with classmates, and reinforcing content through activities such as

the Global Village blog (described in more detail below). The course uses on-line quizzes that provide immediate feedback on performance, and the Epsilon eLearning Environment data analytics allow faculty to monitor student time on task.

As a Red Balloon project, the AASCU *Global Challenges* blended learning course addresses all three core challenges facing higher education identified by George Mehaffy: the need to maximize cost-effectiveness through lower costs, the need to enhance learning outcomes through increased student engagement and participation, and the need to reconsider teaching and learning in the context of 21st century technology (Mehaffy, 2010).

1. **Cost.** The course is available for use in classrooms at a cost of \$50 per student. An Epsilon site license is not necessary to access the course when subscribed to through AASCU *Global Challenges*. Although faculty can choose to assign additional texts, the course shell contains sufficient material to serve in lieu of a textbook. Given the price of the typical college textbook, the \$50 price tag represents a cost savings for most students. Moreover, Mehaffy described the ponderous “cottage industry model – where the entire operation, from design through delivery to assessment, gets handled by the same institution” (p. 14). The *Global Challenges* course disrupts that model, saving faculty and their institutions both time and money.
2. **Engagement.** The blended learning model of the *Global Challenges* course provides engaging, interactive content including recorded presentations and lectures, articles, interactive maps and programs, individualized research, student-driven blogs interactive forums, and a call to action at the local and/or global level. When used in the blended format, the out-of-class activities make space for more participatory time in the classroom because the instructor does not have to use face-to-face class time for content delivery via standard lectures.
3. **Technology.** The course makes the most of 21st century technologies, re-thinking the “classroom” and changing the roles of instructors and students. Students can move at their own pace, replaying material they find confusing or particularly fascinating. Interactive maps and programs allow students to manipulate data and explore information of particular interest. Students learn to be better consumers of information and to use information technologies more effectively. Quizzes provide immediate feedback. Moving significant amounts of content to the course shell in Epsilon frees up face-to-face class time for class discussion and/or service learning projects. The turnkey course is fully customizable. Moreover, the

hyper-current nature of *The New York Times* digital database means that faculty can use the course technology to bring the most up-to-date information into the course shell, making the material far more timely than is possible with a regular textbook.

The *Global Challenges* course was piloted in spring 2012. The pilot included on-campus and purely virtual offerings, AASCU and non-AASCU institutions, public as well as private liberal arts campuses, and one international campus. In fall 2012 the course launched for general delivery. It is presently in use on several campuses as a course for students and on a few campuses to facilitate faculty development workshops.

Global Challenges: Promise & Peril in the 21st Century, An eBook

As the Global Engagement scholars completed the model course, it became clear that although the blended learning course was a useful format for many campuses and courses, another model might expand access and usefulness to additional potential audiences. Again, *The New York Times* partnership proved pivotal. Felice Nudelman, then Executive Director of Education for *The New York Times*, introduced Sourcebooks to the *Global Challenges* Project. Over the next several months, Sourcebooks took content from the *Global Challenges* course and moved it into an eBook platform. Supplementing the course content created by the original team of eight scholars, the eBook benefited from contributions by academics representing four additional disciplinary perspectives. The scholars edited the eBook to include some features not present in the Epsilon course. Specifically, the *Global Challenges* eBook contains a longer introduction to the content with a glossary to give students a greater foundation of understanding, a section that explores the promise and peril of each of the seven challenges, and a section that considers in great depth connections between and among the challenges. The eBook format does not feature assignments, discussion boards, blogs, quizzes, or exams. It does, however, make use of *The New York Times* digital content repository, CSIS materials, and other rich content resources also present in the course shell.

While some faculty may wish to bundle the eBook and course for use in a single classroom, other faculty will likely prefer one or the other. The eBook offers maximum flexibility for use in the context of a wider variety of courses while still making excellent use of 21st century technologies.

The eBook was beta tested at Fort Lewis College (Colorado) in the fall of 2012 and was made available for general use spring 2013. As with the blended learning course, the *Global Challenges* eBook responds to each of Mehaffy’s Red Balloon challenges: 1) cost: the eBook sells for even less than access to the eCourse; 2) engagement: the eBook will include

many interactive features designed to engage students, but will also, via embedded video, move some content that would traditionally be offered in the classroom to the virtual environment, thus freeing up in class time for other activities; and 3) technology: the eBook makes use of cutting edge technologies.

Resources for Instructors

Information about these seven trends relies on diverse fields; thus, finding adequate resources from a single textbook has not proven possible. In addition, faculty members are not experts in areas as varied as population demographics, international trade, and genetic engineering. These realities can make some faculty members resistant to teaching content of this nature. Indeed, these are among the reasons why *Global Challenges* was appropriate as a Red Balloon Project. The interdisciplinary, rapidly changing, and expansive content is suitable for unique public/private partnerships, for collaborative course redesign, and for cutting-edge technological approaches to provide structure and rapidly updated content that could draw from the wealth of resources both on-line and in-print that deal with these issues. The *Global Challenges* Red Balloon Project makes use of a wide range of resources. Many resources are included in the blended learning course and/or the eBook while other resources can readily be added to the model course if an individual campus has appropriate subscriptions. Still other resources, while not included in either the model course or the eBook, may inform faculty course preparation.

Articles from current magazines and periodicals are important in a class about revolutionary changes and the future. Due to copyright restrictions, resources outside *The New York Times* digital content repository or the public domain could not be included in the model course or eBook. However, most university libraries carry subscriptions to top magazines; as a result, articles can be accessed through individual campus libraries either as direct links to digital subscription content or as .pdf files uploaded into the individual course shells based upon those subscriptions. Articles from *National Geographic*, *Scientific American*, *The Economist*, *The Futurist*, *Foreign Policy*, *Foreign Affairs*, *The Atlantic*, *Wired*, *Newsweek*, and *Time* have frequently been used.

Assignments and Pedagogy

The nature of this material affords the opportunity for creative assignments, projects, and papers designed to make students more aware of global trends, as well to allow them to practice creating their own ideas and developing their own voices in understanding and responding to how these changes affect them as individuals. Students develop critical thinking

Resources

- TED Talks. <http://www.TED.com> 10-20 minute talks at the TED conference from leading experts in many diverse fields including technology, biology, global issues, population, etc. The speakers are asked to give “the talk of their lives” in 20 minutes.
- Worldmapper. <http://www.Worldmapper.org> Graphical representation of global statistics. The geographical world map is configured to represent a specific statistic. For example, for malaria deaths, Africa is extremely large but the USA is just a sliver.
- CIA Factbook. <https://www.cia.gov/library/publications/the-world-factbook/index.html> and <http://www.un.org/en/> provide excellent global statistics.
- *National Geographic*. <http://www.nationalgeographic.com/> provides good coverage of world events.
- Diigo. <http://Diigo.com> This is a repository of on-line material by groups. The 7-Revolutions committee has set up a group where faculty members submit good on-line resources tagged by topics with short summaries of the resources. Anyone can join the 7-Revolutions Diigo.com group.
- <http://www.facebook.com/7Revolutions>. This is a Facebook page hosted by the author of this paper and with current issues posted weekly.
- Valuable online global news sources include *BBC (British Broadcasting Corporation)*, *Al Jazeera*, *The Economist*, *National Public Radio (NPR)*, *China Daily*, *The World (from Public Radio International and BBC)*, *Google News*, *Hindustan Times*, *All Africa*, *The Africa Report*, *Asia News Network*, *Global Issues.org*, *Christian Science Monitor*, and *The Globalist*
- *Global Issues 25th edition*, edited by Dr. Robert M. Jackson (contains separate articles on global issues)
- *Limits to Growth: The 30-year Update* by Donella H. Meadows, Jorgen Randers, and Dennis L. Meadows (population, resources and governance)
- *2052: A Global Forecast for the Next Forty Years* (population, resources, economics and conflict)
- *Common Wealth* by Jeffrey Sachs (poverty, world population, UN Millennium Goals, biodiversity)
- *The World is Flat* by Thomas Friedman (economics)
- *Creating a World Without Poverty* by Muhammad Yunus (micro-lending)
- *The Post-American World* by Fareed Zakaria (geopolitical changes)
- *The Singularity is Near* by Ray Kurzweil (the future of technology)
- *Every Nation for Itself: Winners and Losers in a G-Zero World* by Ian Bremmer (economics)
- *A Long Way Gone: Memoirs of a Boy Soldier* by Ishmael Beah (good for student reading)

skills and a greater sense of self-efficacy. The *Global Challenges* initiative benefits from a strong sense of collaboration among the scholars. The AASCU members have developed and shared different assignments and activities that are being used in their respective courses. The model course includes some of the assignments and the Tool Kit includes additional assignments. In this paper we will describe two such assignments and how

they are being used at Fresno State.

Service Learning: Save-the-World Project

Topics in a course of this nature (such as poverty, depleting water tables, pollution, and new modes of warfare) can be quite ominous. To give students a way of coping with material and to give them a sense of empowerment, a service learning assignment was created entitled, "Save-the-World." The save-the-world project has been used for the past four years in the upper division honors course at Fresno State, but other campuses use similar service learning assignments. For this assignment, students are asked to improve the world in some way that reflects upon one of the seven global trends. They are required to commit a minimum of ten hours of service time, but many students often commit more than ten hours. While the assignment sheet has several suggestions including the local contact information for several organizations as well as Fresno State's service learning program, one goal of this assignment was to give students freedom in how they choose to make changes in the world around them. For this assignment, students submit a one-paragraph proposal with only two areas of restriction: students cannot promote a specific religious ideology nor can they promote a for-profit business. Students perform their service and document their progress in an e-portfolio including pictures, texts, embedded videos, and links. Finally, students write a two-page reflection paper on what they did, what they learned, how it related to the material in the class and, of course, how they saved the world. At the end of the semester, students present a 10-minute PowerPoint lecture on their project.

The freedom that students were afforded produced a wide range of ideas and efforts. An analysis found that assignments broke down into four basic inter-connecting categories: 1) raising money and awareness for an NGO, 2) educating the public, 3) volunteering service for a non-profit organization, and 4) self-improvement. Over five courses at Fresno State, the percentage of each type of project broke down to education (44%), raising money (26%), volunteering (22%), and life improvement (8%).

If students chose to raise money for an organization, they were asked not merely to solicit donations, but also to raise money in a way that promotes education. For example, a student had a Heifer International cocktail party, where friends and family learned about the mission of this organization and in the process, the student raised enough money to purchase animals for a needy family. Educating the public was a broad category. Some students gave presentations on water pollution and conservation, recycling, or biodiversity at an elementary school or youth group. Some organized book clubs where they would meet with family and friends to discuss books relevant to these issues. The following books were used: *An Inconvenient*

Truth, by Al Gore, *Three Cups of Tea* by Greg Mortenson and David Relin, and *Banker to the Poor* by Muhammad Yunus. Several students organized education parties within their dorm, sorority, or fraternity. For example, one student organized a party to educate about the use of plastics: people decorated reusable grocery bags, compared the taste of tap water and bottled water, and played educational games about the use of plastic in society. Others used the Internet to disseminate information by creating on-line blogs, Facebook groups, YouTube videos or Wikipedia submissions. Several students created a detailed and informative PowerPoint lecture that was then posted on [Slideshare](#) (a repository for PowerPoint lectures). There was a wide range of volunteer activity including river restoration, park clean-up days and soup kitchens. Still others worked on improving their own lives, including one student who committed to systematically reducing her personal carbon footprint.

Some students made truly exceptional efforts. One student, committed to understanding the poverty statistic that 45% of the world's population live on less than \$2 a day, spent one month limiting her food expenses to \$2 a day. She kept a blog on Facebook, including what she ate and its cost. A second student, who majored in art, did a four-minute paper animation video about using plastic bags, *Why Plastic Bags are Evil*. This was extremely creative and informative and has been shared at a number of *Global Challenges* institutes and workshops.

Global Village

The second assignment, Global Village, has been used at a number of AASCU institutions and was originally developed by Dr. Dennis Falk at the University of Minnesota Duluth. The purpose of this activity is for students to gain a valuable perspective on our world by examining how people in different countries are affected by global issues and trends. The activity allows class members to simulate being a "global village" that represents the demographics of the 7.1 billion people who currently inhabit the earth. The idea is to represent the world as a global village of 100 people. It is difficult to comprehend data about the world's population as a whole, but if one created a global village of 100 people, the numbers could be more tractable. For example, if the world were a global village of 100 people, about 20 of those people would live in China, 13 of them would live in Africa, and about 5 would live in the United States. About 13 would be malnourished and about 15 would live on \$1 a day or less.

For the Global Village activity, each student is asked to take the role of one individual from a specific country, but will in turn represent millions of people who have a similar background. The activity is set up for the class to have a proportionate number of people from the various continents

and countries of the world, with half of the class being female and half male, and ages and residence (urban or rural) also being representative. If the class has fewer than 100 students, the pre-established spreadsheet of members of the village is set up so proportions will remain appropriate as long as students are assigned to roles beginning at the top of the list and continuing down to the number of the students in the class. Here is an example of the first five global villagers.

	Country	Sex	Age	Area / City	Latitude	Longitude
1	China	Female	32	rural	30° N	105° E
2	India	Male	6	rural	20° N	75° E
3	USA	Female	73	Alabama	32° N	85° W
4	Indonesia	Female	1	Jakarta	6° S	106° E
5	Brazil	Male	23	rural	10° S	60° W

This was one of the assignments used in the First-Year-Experience Program at Fresno State, where 100 students were placed in “learning communities” to take their first year of courses in Math, English, History, Critical Thinking, Political Science, Biology, and Communication together. These courses were taught by different instructors all with the unifying theme of global challenges. The student’s Global Villager was used as a part of assignments in several courses. As an example of its use, Lisa Anderson teaches critical thinking in Anthropology and began her class with an assignment for students to interact on a discussion board introducing other classmates to their global villagers (name, sex, location, and how they imagined their villager). They were then asked to view the posts left by other classmates and respond to at least one answering the question: “If your two global villagers were ever to meet, what do you think their interactions with one another would be like? (i.e., Friendly? Dismissive? Hostile? etc.) Why?”

Faculty members who have used Global Village as part of their class curriculum note some important considerations. First, if the students are not encouraged to make an in-depth analysis of their global villager, then preconceived notions and stereotypes can be perpetuated. This is also true if the student chooses to focus on certain statistics about education, poverty, and/or crime associated with their global villager. Students need to use their global villager as an ambassador to their region, understanding positive as well as negative attributes. The instructor must use the global villager in a thoughtful and limited manner so that it is integral to the learning assignment and not an afterthought or preoccupation. This had

been a concern raised by students who felt that some faculty members in the First-Year-Experience Program at Fresno State overused the Global Villager.

Cross Institute Assessment

In 2008 several global scholars worked together to create a short questionnaire that could be given as a pre- and post-semester assessment of attitudes about global issues and the future in courses taught around the framework of global challenges. Six AASCU institutions participated with 519 surveys collected at the beginning of the semester and 392 at the end. The questions were as follows with students responding (1) Strongly Disagree (2) Disagree (3) Neutral (4) Agree (5) Strongly Agree:

1. I know quite a lot about the main issues facing the world today.
2. I know quite a lot about the main issues that will likely face the world in 2025.
3. I feel confident in forecasting what the world will be like in 2025.
4. I am committed to civic involvement (e.g., voting).
5. I am very knowledgeable about how to get involved in civic life.
6. I believe my actions can make a difference in shaping the future.
7. I am optimistic about the future.
8. It is important to withhold judgment when exposed to new information.
9. I am curious about what happens in other parts of the world.
10. I feel a connection to people in different parts of the world.
11. Events happening in other parts of the world affect my daily life.
12. I read information about other parts of the world regularly.

A repeated measures ANOVA was performed with questions as the within subject factor and gender, year in school and pre/post-semester responses as the between subject factors. Figure 1 shows the pre- and post-semester scores across all participants for each of the 12 questions. It was clear that there was an overall difference between pre- and post-semester responses, $F(1, 542) = 60.98$, $P < 0.001$. It is also clear that this improvement depended on the questions as indicated by a question by pre/post-semester interaction, $F(9.08, 4919.42) = 18.77$, $p < 0.001$. The only questions where there was not a significant improvement of scores were question 7 concerning optimism about the future and question 9 concerning curiosity about different parts of the world. But as can be seen in Figure 1, questions 7 and 9 both started with relatively high scores at the pre-semester survey, indicating that students enter the class with a relatively high level of optimism and curiosity about these topics. The improvement on the other questions gives a strong indication that students view

themselves as gaining a great deal of information (questions 1, 2, and 3), that they feel more engaged and empowered about involving themselves in local and global issues (questions 4, 5, and 6), and that they feel more connected and see the importance of being connected to people around the world (questions 10, 11 and 12) following a course taught around a global challenges theme.

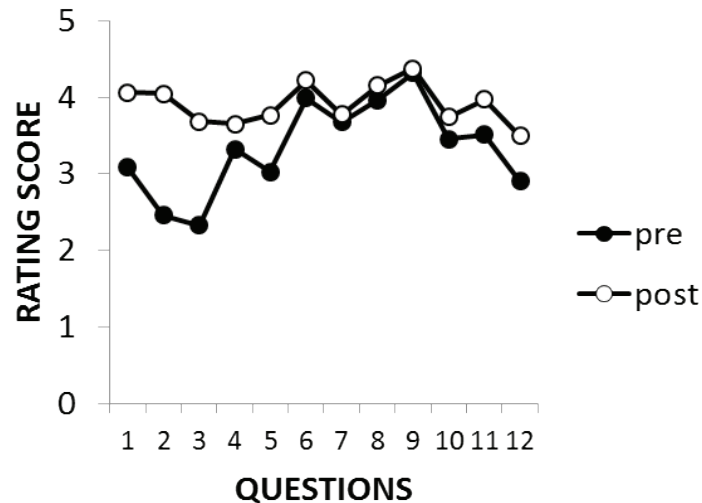


Fig. 1. The pre- and post-semester responses for each question averaged across universities.

This initial assessment effort provides some preliminary indication that the course is effectively educating globally competent citizens on the participating AASCU campuses; however, more extensive assessment is needed. Planning is underway to better assess the growing number of students on campuses using the blended learning course, including analysis of data analytics embedded in the Epsilon eLearning system.

Conclusion

There is a strong push in higher education to help prepare our students to meet the challenges of a rapidly changing world. With fiber optics and the exponential increase in computer speed, our students will be competing and collaborating with people around the world. This technology brings a future of exciting new advances in medicine, genetics and neuroscience. But the future can also be rather daunting with issues of increasing population in some areas and rapid decrease in others and a scarcity in resources like energy, food, and clean water. We also face other global challenges such as rapid urbanization, climate change and the loss of biodiversity, and changes in the role of the nation-state with increasing involvement of non-

governmental organizations in public policy making. The *Global Challenges* initiative is an attempt to bring different disciplines together to try to help our students understand and prepare for these challenges.

But there is also a push in higher education to lower costs, increase student engagement, and make better use of rapidly changing technologies. *Global Challenges*, as an AASCU Red Balloon Project, is also an attempt to respond to this critical need to reimagine higher education. Charles Darwin once said, "It is not the strongest of the species that survives, nor the most intelligent, but rather the most responsive to change." In terms of content and delivery models, *Global Challenges* is an innovative model responsive to multiple dimensions in need of change.

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